

REMARKS

Regarding Priority

The Office action states, “The certified copy of the German patent application has been received. However, there is no copy of the applicant’s intervening PCT application in the file.” We are uncertain why the PCT application is not in the file. We have received a notice from the International Bureau stating that the PCT application was communicated to the USPTO on December 27, 2002. In an attempt to satisfy the Office’s concern regarding this matter, we have enclosed a copy of this document and a copy of the PCT publication of Applicant’s PCT application for the Office’s convenience. Please feel free to contact us if this does not settle the matter.

Drawing Objections

The Office action objected to the drawings as not including every feature of the invention in the claims, more specifically, the “evaluation circuit,” the “memory unit,” the “diagnostic unit,” and the “temperature sensor.” The Examiner is requested to approve the accompanying replacement sheet, which has been amended to show each of these elements. The changes to the drawing include the addition of an evaluation circuit 124, a temperature sensor 126, a diagnostic unit 128, and a memory unit 130 to FIG. 5. All of these elements were disclosed in the originally filed specification (e.g., see paragraphs [0031]-[0042]) and do not present new matter.

Specification Amendments

The specification is amended to replace paragraph [0079] and add paragraphs [0079.1]-[0079.4]. Paragraph [0079] is amended for clarification purposes. Paragraphs [0079.1]-[0079.4] are substantially duplicates of paragraphs [0035], [0038], [0040], and [0042], respectively, with the addition of element numbers. Accordingly, these amendments do not add new matter.

Claim Rejections

Claims 1-15 are pending in this application. Claims 5, 7, 8, and 10-12 were rejected under 35 U.S.C. § 112 as failing to comply with the written description requirement. Claims 1, 3, 4, 6, and 13 were rejected under 35 U.S.C. § 102(b) as anticipated by Delphi Technologies EP 0955203 A2 (hereinafter, “Delphi”). Claim 2 was rejected under 35 U.S.C. § 103(a) as unpatentable over Delphi in view of U.S. Patent 5,243,146 to Nishitani (hereinafter, “Nishitani”). Claim 7 was rejected under 35 U.S.C. § 103(a) as unpatentable over Delphi in view of U.S. Patent 5,785,347 to Adolph et al. (hereinafter, “Adolph”). Claims

8-12 were rejected under 35 U.S.C. § 103(a) as unpatentable over Delphi in view of U.S. Patent 6,070,115 to Oestreichler et al. (hereinafter, “Oestreichler”) and U.S. Patent 6,725,165 to Knox et al. (hereinafter, “Knox”). Finally, Claims 14 and 15 were rejected under 35 U.S.C. § 103(a) as unpatentable over Delphi in view of U.S. Patent 6,323,443 to Aoki et al. (hereinafter, “Aoki”).

Rejections Based Upon 35 U.S.C. § 112

Applicant respectfully traverses the Office’s 35 U.S.C. § 112 rejections. The Office states that, “[t]here seems to be no mention in the written description of a ‘memory unit,’ a ‘diagnostic unit,’ or a ‘temperature sensor.’” Applicant respectfully points out that a “memory unit” is disclosed in originally filed paragraphs 40 and 42, a “diagnostic unit” is disclosed in originally filed paragraphs 38 and 42, and a “temperature sensor” is disclosed in originally filed paragraphs 35 and 42.

Furthermore, “temperature correction of the weighing signals” is disclosed in originally filed paragraph 35, performing “a check on functional capability of the load cells at predetermined time intervals or when predetermined events occur” is disclosed in originally filed paragraph 38, “a memory unit for recording the weighing signals” is disclosed in originally filed paragraph 40, storing peak load values is disclosed in originally filed paragraph 42, and “the output signal is a signal which designates one of a number of predetermined weight classes” is disclosed in originally filed paragraph 33. Applicant has further amended the specification to reiterate the disclosure of these elements in the Detailed Description of the Invention, further adding reference numbers corresponding to amended FIG. 5. Therefore, since each of these claim limitations are present in the specification as originally filed, Applicant respectfully requests that these rejections be withdrawn or at least further clarification provided with respect to these rejections.

Rejections Based Upon 35 U.S.C. § 102(b)

Applicant respectfully traverses the Office’s rejections of claims 1, 3, 4, 6, and 13 as anticipated by Delphi. Delphi shows a vehicle seat including a weight adjustment mechanism for the vehicle seat by virtue of a pivot structure 22. The technology described in the Delphi reference, however, uses a load cell which comprises a two-part force transducer, comprising the U-shaped bracket 36 and a resilient plate 38. The resilient plate 38 is fixed on top of the U-shaped bracket 36 to enclose shank 32. The U-shaped bracket 36 is attached to the frame 20 supporting the sitting area 16, as may be best seen in Figure 3, via a weld 26, whereas shank 32 supports the resilient plate 38 which is fixed on top of the U-shaped bracket 36 at both ends by screws 40. In between the screws 40 and in line with shank 32, a sensor

element 44 is attached to the mounting bracket 38 which is a strain sensing element. Therefore, the subject matter of present claim 1 differs firstly in that a “one-piece force transducer” is claimed instead of a two-piece force transducer as disclosed in Delphi (underline emphasis added).

Claim 1 also differs from the Delphi reference in that the claim requires “an elastically deformable part and a non-deforming part,” which is not disclosed in Delphi. In Applicant’s invention, the load cells are designed such that upon a load acting on the load cell, the elastically deformable part yields which results in a change of the distance between said elastically deformable part and the non-deforming part of the force transducer. In case of the Delphi reference, not only the resilient plate 38 will yield and deform, but also the U-shaped bracket 36 will deform, because the resilient plate 38 is fixed with screws 40 to the U-shaped bracket 36 and the deformation of the mounting bracket will inevitably result in a deformation of one or both of the two upstanding legs of the U-shaped bracket 36.

Additionally, claim 1 is distinguishable from Delphi in that claim 1 requires a “weighing signal resulting from a distance measurement.” In the Applicant’s invention, the load cells are designed such that upon a load acting on the load cell, the elastically deformable part yields resulting in a change of the distance between the elastically deformable part and the non-deforming part of the force transducer. In contrast, Delphi uses a strain sensing element 44 attached to the resilient plate 38 to measure the deflection of the resilient plate 38, i.e. bending motion of the resilient plate 38, but no distance measurement such as that taken in Applicant’s invention is taken in Delphi. Therefore, because Delphi does not disclose a “one-piece force transducer,” “an elastically deformable part and a non-deforming part,” or a “weighing signal resulting from a distance measurement,” claim 1 is clearly novel over the Delphi reference.

With respect to the remaining claims, all of which depend directly or indirectly upon claim 1, it is respectfully submitted that such dependent claims are patentable for at least the same reasons as claim 1. Moreover, each such claim recites additional limitations.

Rejections Based Upon 35 U.S.C. § 103(a)

The Office makes further rejections of claims 2, 7-12, and 14-15 based upon the Delphi reference in view of various secondary references. In view of the clarification and explanation of the Delphi reference above, however, it is respectfully submitted that Delphi does not satisfy the claim elements for which it has been cited as a primary reference. Accordingly, the combinations of references as proposed by the Office action are not operable to render the claims obvious.

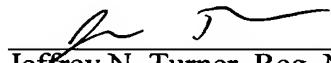
Furthermore, there would be no motivation to redesign the Delphi reference to meet the claims because Delphi is not only structurally different in that Delphi requires a two-piece transducer while Applicant's invention is a one-piece transducer, but also the types of sensors, their position, and the way that they detect loads are entirely different.

For the above reasons, it is respectfully requested that the rejections of claims 1-15 be reconsidered and withdrawn.

Conclusion

The application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned agent.

Respectfully submitted,



Jeffrey N. Turner, Reg. No. 53,707
LEYDIG, VOIT & MAYER, LTD.
Two Prudential Plaza, Suite 4900
180 North Stetson Avenue
Chicago, Illinois 60601-6780
(312) 616-5600 (telephone)
(312) 616-5700 (facsimile)

Date: November 12, 2004

Enclosures

AMENDMENTS TO THE DRAWINGS

Please enter the following amendments to the drawings:

The attached sheet includes changes to FIG. 5. This sheet, which includes FIGs. 5 and 6, replaces the original sheet including FIGs. 5 and 6. The changes to the drawing include the addition of an evaluation circuit 124, a temperature sensor 126, a diagnostic unit 128, and a memory unit 130.

Attachment: Replacement Sheet